CLAIMS

1. An acoustic liner (1), c h a r a c t e r i z e d i n that it comprises a layer (3) of a metallic foam.

2. An acoustic liner according to claim 1, c h a r a c t e r i z e d i n that it further comprises a liner core (2).

3. An acoustic liner according to claim 2, c h a r a c t e r i z e d i n that it has a non-linearity factor within a range between 1.0 and 3.0.

4. An acoustic liner according to claim 3, c h a r a c t e r i z e d i n that the non-linearity factor is within a range between 1 and 2.5.

5. An acoustic liner according to claim 4, c h a r a c t e r i z e d i n that the non-linearity factor is within a range between 1.5 and 2.0.

6. An acoustic liner according to claim 2, c h a r a c t e r i z e d i n that a first surface of said metallic foam layer (3) is attached to one side of said liner core (2).

7. An acoustic liner according to claim 2, c h a r a c t e r i z e d i n that the liner core (2) is a honeycomb core.

8. A metallic liner according to claim 2, c h a r a c t e r i z e d i n that the liner core (2) is a core of metallic foam.

9. An acoustic liner according to claim 2, c h a r a c t e r i z e d i n that it further comprises a perforated sheet (4) attached to the metallic foam layer (3).

10. An acoustic liner according to claim 1, c h a r a c t e r i z e d i n that the metallic foam layer (3) is arranged to withstand temperatures above about 400°C.

11. An acoustic liner according to claim 10, c h a r a c t e r i z e d i n that the metallic foam layer (3) is arranged to withstand temperatures around 700°C.

12. An acoustic liner according to claim 11, c h a r a c t e r i z e d i n that the metallic foam layer (3) comprises a metal or metal alloy including Nickel, Titanium and/or Chromium.

13. An acoustic liner according to claim 1, c h a r a c t e r i z e d i n that the metallic foam is at least partly open-porous.

14. Use of a liner comprising a layer (3) of a metallic foam as an acoustic liner.

15. Use of liner according to claim 14, c h a r a c t e r i z e d i n that the liner is used in a hot stream environment.

16. Use of a liner according to claim 15, c h a r a c t e r i z e d i n that it is used in a hot area of an aircraft engine.

17. Method for manufacturing an acoustic liner (1), c h a r a c t e r i z e d i n that a top sheet (5) including a metallic foam layer (3) is brazed onto one side of a liner core (2).

18. Method according to claim 17, c h a r a c t e r i z e d i n that a perforated sheet (4) is brazed onto the foam layer (3) in forming the top sheet (5).